

## **Product datasheet for SR302846**

#### OriGene Technologies, Inc.

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### MDH1 Human siRNA Oligo Duplex (Locus ID 4190)

#### **Product data:**

**Product Type:** siRNA Oligo Duplexes

Purity: HPLC purified

Quality Control: Tested by ESI-MS

Sequences: Available with shipment

**Stability:** One year from date of shipment when stored at -20°C.

# of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

**Note:** Single siRNA duplex (10nmol) can be ordered.

**RefSeq:** <u>NM 001199111, NM 001199112, NM 005917, NM 001316374</u>

UniProt ID: P40925

Synonyms: DEE88; EIEE88; HEL-S-32; KAR; MDH-s; MDHA; MGC:1375; MOR2

Components: MDH1 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 4190)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml

**Summary:** This gene encodes an enzyme that catalyzes the NAD/NADH-dependent, reversible oxidation

of malate to oxaloacetate in many metabolic pathways, including the citric acid cycle. Two main isozymes are known to exist in eukaryotic cells: one is found in the mitochondrial

matrix and the other in the cytoplasm. This gene encodes the cytosolic isozyme, which plays a key role in the malate-aspartate shuttle that allows malate to pass through the mitochondrial membrane to be transformed into oxaloacetate for further cellular processes. Alternatively spliced transcript variants have been found for this gene. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is localized in the peroxisomes. Pseudogenes have been identified on chromosomes X and 6.

[provided by RefSeq, Feb 2016]







# Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).